



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/776,635
Applicant : John J. ROSSI et al.
Filed : February 12, 2004
TC/A.U. : 1645
Examiner : To Be Assigned

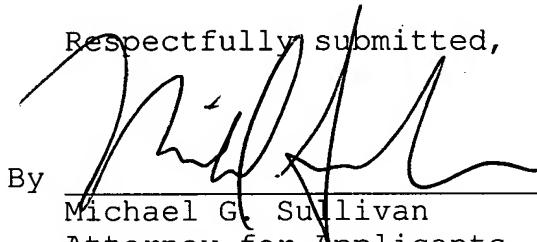
Docket No. : 1954-418
Customer No. : 06449
Confirmation No. : 1769

INFORMATION DISCLOSURE STATEMENT

Director of the United States Patent
and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Under the provisions of 37 C.F.R. §§ 1.56, 1.97 and 1.98,
Applicant submits herewith information that the Office may wish
to consider in examination of the subject application. Materials
submitted for consideration are listed on the attached form PTO-
1449.

Respectfully submitted,

By _____
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Enclosure(s):
PTO-1449 Forms
Thirty-Two References (32)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <small>DEC 14 2004 PATENT & TRADEMARK OFFICE 92</small>		Complete if Known	
		Application Number	10/776,635
		Filing Date	February 12, 2004
		First Named Inventor	John J. ROSSI et al.
		Group Art Unit	1645
		Examiner Name	To Be Assigned
Sheet 1 of 4		Attorney Docket Number	1954-418

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
	AA	6,506,559	B1	Fire et al.	January 14, 2003
	AB	2002/0086356	A1	Thomas Tuschl et al.	July 4, 2002
	AC	2002/0173478	A1	Alan Gewirtz	November 21, 2002

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office ³ Code	Number ⁴	Kind ⁵ (if known)		
	AD	PCT	WO 02/44321	A2	MAXPLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN E.V.	June 6, 2002
	AE	PCT	WO 03/022052	A1	California Institute of Technology	March 20, 2003

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code.

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

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Sheet 2 of 4		Attorney Docket Number	1954-418

NON-PATENT LITERATURE DOCUMENTS		
	AF	Barton, Gregory M., et al., "Retroviral delivery of small interfering RNA into primary cells," <i>PNAS</i> 99(23):14943-14945, November 12, 2002.
	AG	Brummelkamp, Thijn R., et al., "A System for Stable Expression of Short Interfering RNAs in Mammalian Cells," <i>Science</i> 296:550-553, April 19, 2002.
	AH	Caplen, Natasha J., et al., "Specific inhibition of gene expression by small double-stranded RNAs in invertebrate and vertebrate systems," <i>PNAS</i> 98(17):9742-9747, August 14, 2001.
	AI	Clemens, James C., et al., "Use of double-stranded RNA interference in <i>Drosophila</i> cell lines to dissect signal transduction pathways," <i>PNAS</i> 97(12):6499-6503, June 6, 2000.
	AJ	Devroe, Eric, et al., "Retrovirus-delivered siRNA," <i>BMC Biotechnology</i> 2(15):1-5, August 28, 2002.
	AK	Elbashir, Sayda M., et al., "Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells," <i>Nature</i> 411:494-498, May 24, 2001.
	AL	Elbashir, Sayda M., et al., "RNA interference is mediated by 21- and 22-nucleotide RNAs," <i>Genes & Development</i> 15:188-200, 2001.
	AM	Fire, Andrew, "RNA-triggered gene silencing," <i>TIG</i> 15(9):358-363, September 1999.
	AN	Fire, Andrew, "Potent and specific genetic interference by double-stranded RNA in <i>Caenorhabditis elegans</i> ," <i>Nature</i> 391:806-811, February 19, 1998.
	AO	Good, PD, et al., "Expression of small, therapeutic RNAs in human cell nuclei," <i>Gene Therapy</i> 4:45-54, 1997.
	AP	Hamilton, Andrew, et al., "Two classes of short interfering RNA in RNA silencing," <i>The EMBO Journal</i> , Vol. 21, No. 17, pp. 4671-4679, 2002
	AQ	Hammond, Scott M., et al., "An RNA-directed nuclease mediates post-transcriptional gene silencing in <i>Drosophila</i> cells," <i>Nature</i> 404:293-296, March 16, 2000.

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NON-PATENT LITERATURE DOCUMENTS			
	AR	Herman, James G., et al., "Methylation-specific PCR: A novel PCR assay for methylation status of CpG islands," <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 93, pp. 9821-9826, September 1996.	
	AS	Kawasaki et al., "Short hairpin type of dsRNAs that are controlled by tRNA ^{Val} promoter significantly induce RNAi-mediated gene silencing in the cytoplasm of human cells," <i>Nucleic Acids Research</i> 31(2):700-707, January 2003.	
	AT	Kennerdell, Jason R., et al., "Use of dsRNA-Mediated Genetic Interference to Demonstrate that <i>frizzled</i> and <i>frizzled 2</i> Act in the Wingless Pathway," <i>Cell</i> 95:1017-1026, December 23, 1998.	
	AU	Lee et al., "Expression of small interfering RNAs targeted against HIV-1 <i>rev</i> transcripts in human cells," <i>Nature Biotechnology</i> 19:500-505, May 2002.	
	AV	Lipardi, Concetta, et al., "RNAi as Random Degradative PCR: siRNA Primers Convert mRNA into dsRNAs that are Degraded to Generate New siRNAs," <i>Cell</i> 107:297-307, November 2, 2001.	
	AW	Miyagishi et al., "U6 promoter-driven siRNAs with four uridine 3' overhangs efficiently suppress targeted gene expression in mammalian cells," <i>Nature Biotechnology</i> 19:497-500, May 2002.	
	AX	Paddison et al., "Short hairpin RNAs (shRNAs) induce sequence-specific silencing in mammalian cells," <i>Genes and Development</i> 16:948-958, March 2002.	
	AY	Paul, Cynthia P., et al., "Effective expression of small interfering RNA in human cells," <i>Nature Biotechnology</i> 29:505-508, May 2002.	
	AZ	Scherr, Michaela, et al., "Rapid determination and quantitation of the accessibility to native RNAs by antisense oligodeoxynucleotides in murine cell extracts," <i>Nucleic Acids Research</i> 26(22):5079-5085, 1998.	
	BA	Sharp, Phillip A., et al., "RNA interference - 2001," <i>Genes & Development</i> 15:485-490, 2001.	
	BB	Shi, Y., "Mammalian RNAi for the masses," <i>Trends in Genetics</i> 19(1):9-12, January 2003.	

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	BC	Shinagawa et al., "Generation of Ski-knockdown mice by expressing a long double-strand RNA from an RNA polymerase II promoter," <i>Genes and Development</i> 17:1340-1345, April 2003.	
	BD	Sijen, Titia, et al., "On the Role of RNA Amplification in dsRNA-Triggered Gene Silencing," <i>Cell</i> 107:465-476, November 16, 2001.	
	BE	Sui, Guangchao, et al., "A DNA vector-based RNAi technology to suppress gene expression in mammalian cells," <i>PNAS</i> , Vol. 99, No. 8, pp. 5515-5520, April 16, 2002.	
	BF	Svoboda, Petr, et al, "Selective reduction of dormant maternal mRNAs in mouse oocytes by RNA interference," <i>Development</i> 127:4147-4156, 2000.	
	BG	Tuschl et al., "Expanding small RNA interference," <i>Nature Biotechnology</i> 20:446-448, May 2002.	
	BH	Wianny, Florence, et al., "Specific interference with gene function by double-stranded RNA in early mouse development," <i>Nature Cell Biology</i> 2:70-75, February 2000.	
	BI	Yu, Jenn-Yah, et al., "RNA interference by expression of short-interfering RNAs and hairpin RNAs in mammalian cells," <i>PNAS</i> 99(9):6047-6052, April 30, 2002.	

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